

EXHIBIT E

Surface Water Quality Standards Triennial Review Results—Five-Year Plan August 2011

Background

Triennial Review Process:

- Triennial review process was announced November 2, 2010.
- Public meetings with formal hearings were held around the state in November 2010 (Lacey, Spokane, Yakima, Vancouver, and Mt. Vernon).
- The Triennial Review process provided a forum to discuss what new initiatives are being developed by EPA; to solicit suggestions for where guidance is needed to implement the current standards, and to solicit suggestions for what new or revised criteria are needed in the regulation. It was not a rulemaking process.
- Comments were received through December 17, 2010. Ecology received comments from 44 entities.
- A Five-Year Work Plan was developed from comments received. A responsiveness summary was also developed.

Selection of Water Quality Standards Triennial Review Topics came from:

- Public comments received by December 17, 2010.
- Obligations stemming from the EPA 2006 Approval and ESA Consultation.
- EPA-mandated standards and criteria issues.
- Suggestions from Ecology staff who implement the standards.

Water Quality Standards Topics Grouped By:

- Numeric Criteria Updates or Revisions
- Use Designation Updates or Changes
- Other Rule Revisions to Better Implement the Standards
- Guidance or Policy to Implement the Standards

**Water Quality Standards Triennial Review
Five-Year Work Plan
FY 2012 – FY 2016**

Numeric Criteria Updates or Revisions					
WQ Standards Topic	Fiscal Year				
	W=Staff Work R=Begin Rule (CR 101)				
	12	13	14	15	16
<i>Toxics-Human Health</i> Work with tribes, regulated industry, and stakeholders to begin the process to update human health criteria and establish an appropriate fish consumption rate (FCR) number for Washington. Work with Ecology Toxics Cleanup Program as they adopt fish consumption rates into the Sediment Management Standards. Develop implementation tools (such as variances, compliance schedules) for permitted facilities to stay in compliance with the standards when more protective criteria are adopted.	R	R			
<i>Dissolved Oxygen (D.O.)-Fresh</i> <ul style="list-style-type: none"> • Adopt D.O. criteria that better protects spawning beds (intragravel D.O.). • Add a percent saturation criterion to eliminate false violations due to natural effects of temperature on D.O.; add clarity on “dominant aquatic habitat”. 	W	R	R		
<i>Fine Sediment/Turbidity</i> Adopt numeric or narrative standards to protect waters from excess fine sediments to protect spawning beds and aquatic life. Consider revising turbidity criteria to apply to landscape activities (nonpoint sources).	W	R	R		
<i>Toxics-Aquatic Life</i> Update aquatic life-based criteria in the standards, including metals criteria developed by EPA that are based on the biotic ligand model (BLM).				W	R
<i>Bacterial Indicators</i> Propose new bacteria indicators and criteria for marine and freshwater when EPA national criteria updates are finalized (projected to be done 2014).				W	R
<i>Total Dissolved Gas</i> Review the 110% TDG standard to determine if new data indicates an update is needed. Identify data gaps that need to be to develop new criteria if necessary.				W	R

Use Designation Updates or Changes					
WQ Standards Topic	Fiscal Year				
	W=Staff Work R= Begin Rule (CR 101)				
	12	13	14	15	16
<i>Use Changes in Table 602</i> <ul style="list-style-type: none"> Revise Table 602 and Supplemental Spawning Maps based on new fish use data from WDFW & tribes, and other resource managers. Update criteria notes in Table 602 and 612 as new data is identified to justify the change or correction. 	W	W	W	R	R
<i>Use Attainability Analysis</i> <ul style="list-style-type: none"> Work with WDFW and other resource agencies to identify areas where the natural condition is a warm water fishery and a use change may be justified. Develop guidance specific to use changes to warm water fisheries. Conduct public process to change uses where UAA indicates use is not existing or attainable in a waterbody. 	W	W	W	R	R
Other Rule Revisions to Better Implement the Standards					
WQ Standards Topic	Fiscal Year				
	W=Staff Work R= Begin Rule (CR 101)				
	12	13	14	15	16
<i>Water Effects Ratio - WER</i> Develop WER implementation guidance and clarify rule language to allow issuance of WERs through NPDES permits.	W	R	R		
<i>Intermittent Waters & Stream Flow</i> <ul style="list-style-type: none"> Develop guidance for effluent discharges to intermittent or ephemeral waters; adopt rule language to address implementation of standards and criteria in low flow situations. Consider adopting narrative standards to protect instream flows to fully support designated uses. 	W	R	R		
<i>Compliance Schedules</i> Adopt language to allow compliance schedules greater than 10 years.	R	R			
<i>Nutrient Criteria</i> Where lake-specific studies have been done on phosphorus limits in accordance with WAC 173-201A-230, adopt site-specific criteria in rule.	W	R	R		
<i>Nonpoint Source Controls</i> Add clarifying language in the rule at WAC 173-201A-510(3)(a) for implementing nonpoint source controls.				W	R

Guidance Or Policy To Implement the Standards

(Fiscal Year work indicated by year)

<p><i>Implementing Standards in Estuaries (FY 12):</i> Provide guidance and clarification of for determining whether fresh or marine numeric criteria apply (based on salinity).</p>	<p><i>Nutrient Criteria (FY 12):</i></p> <ul style="list-style-type: none"> • Provide more guidance on nutrient controls & prevention from anthropogenic sources. • Address issues with nutrient replacement activities that are designed to increase depleted levels of naturally occurring nutrients and achieve historic levels of nutrient contribution from the salmon cycle.
<p><i>Pollutant Trading (FY 12):</i> Finalize guidance for allowing pollutant trading in WA.</p>	<p><i>Bioassessments (FY 12):</i> Provide more guidance for listing impaired waters based on bioassessment targets.</p>
<p><i>Use Attainability Analysis-UAA (FY 12):</i> Finalize UAA Guidance, provide more information on UAAs</p>	<p><i>Antidegradation (FY 12-14):</i> Provide guidance for implementing Antidegradation Tier I, II and III.</p>
<p><i>Lakes & Reservoirs (FY 13):</i> Clarify the procedures for applying criteria to lakes and reservoirs, taking into account natural conditions. Include procedures for implementing criteria in stratified systems and recommended modeling for TMDLs.</p>	<p><i>Identifying Uses and Criteria (FY 13):</i> Develop use & criteria interactive maps to allow a user to quickly identify what uses and criteria apply to waterbodies in the state.</p>
<p><i>pH-due to ocean acidification (FY 12-14):</i> Develop improved more accurate methods for measuring pH in marine conditions; guidance for implementing standards in naturally low D.O.</p>	